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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet **1**of **3****Complete if Known**

Application Number	<b>10/004,170</b>
Filing Date	<b>October 30, 2001</b>
First Named Inventor	<b>Louis B. Rosenberg</b>
Art Unit	<b>2672</b>
Examiner Name	<b>Jeffery A. Brier</b>

Attorney Docket Number **IMMR035/02US****U.S. PATENT DOCUMENTS**

Examiner	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
JB		6,422,941	7/23/2002	Thorner et al.	
JB		6,160,489	12/12/2000	Perry et al.	
JB		6,111,577	8/29/2000	Zilles et al.	
JB		5,690,582	11/25/1997	Ulrich et al.	
JB		5,575,761	11/19/1996	Hajianpour	
JB		5,437,607	8/1/1995	Taylor	
JB		5,436,622	7/25/1995	Gutman et al.	
JB		5,283,970	2/8/1994	Aigner	
JB		5,186,695	2/16/1993	Mangseth et al.	
JB		5,175,459	12/29/1992	Danial et al.	
JB		5,165,897	11/24/1992	Johnson	
JB		5,022,384	6/11/1991	Freels	
JB		4,885,565	12/5/1989	Embach	
JB		4,484,191	11/20/1984	Vavra	
JB		4,464,117	8/7/1984	Foerst	
JB		4,333,070	6/1/1982	Barnes	
JB		4,262,549	4/21/1981	Schwellenbach	
JB		4,127,752	11/28/1978	Lowthorp	
JB		2,972,140	2/14/1961	Hirsch	

Examiner Initials <sup>2</sup>	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)		
		JP	H2-185278		7/19/1990	Taito Corporation
		JP	H4-8381		1/13/1992	Epoch Co. and Key-Planning Co.
		JP	H7-24147		1/27/1995	Sega Corporation
		JP	H5-192449		8/3/1993	Taito Corporation

Examiner Signature	<i>Jeffery A. Brier</i>	Date Considered	<b>3/6/06</b>
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PTO/SB/08A (10-01)

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet **2**of **3**

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		Examiner Name	Jeffery A. Brier
		Attorney Docket Number	IMMR035/02US

### OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
		PATRICK, "Design, Construction, and Testing of a Fingertip Tactile Display for Interaction with Virtual and Remote Environments," <i>Master of Science Thesis</i> , MIT, Aug. 1990, archived Nov. 8, 1990.
		CALDER, "Design of A Force-Feedback Touch-Introducing Actuator For Teleoperator Robot Control," <i>Bachelor of Science Thesis</i> , MIT, May 1983, archived June 23, 1983.
		WIKER, "Teletouch Display Development: Phase 1 Report," <i>Technical Report 1230</i> , Naval Ocean Systems Center, San Diego, July 1988.
		BLISS, "Optical-to-Tactile Image Conversion for the Blind," <i>IEEE Transactions on Man-Machine Systems</i> , Vol. MMS-11, No. 1, March 1970.
		JOHNSON, "Shape-Memory Alloy Tactile Feedback Actuator," <i>Armstrong Aerospace Medical Research Laboratory, AAMRL-TR-90-039</i> , August 1990.
		KONTARINIS et al., "Tactile Display of Vibratory Information in Teleoperation and Virtual Environments," <i>PRESENCE</i> , 4(4):387-402, Harvard Univ., 1995.
		AUKSTAKALNIS et al., "Silicon Mirages: The Art and Science of Virtual Reality," ISBN 0-938151-82-7, pp. 129-180, 1992.
		EBERHARDT et al., "Inducing Dynamic Haptic Perception by The Hand: System Description and Some Results," <i>DSC-Vol. 55-1, Dynamic Systems and Control: Volume 1</i> , ASME 1994.
		GOBEL et al., "Tactile Feedback Applied to Computer Mice," <i>International Journal of Human-Computer Interaction</i> , Vol. 7, No. 1, pp. 1-24, 1995.
		PIMENTEL et al., "Virtual Reality: through the new looking glass," 2 <sup>nd</sup> Edition; McGraw-Hill, ISBN 0-07-050167-X, pp. 41-202, 1994.
		"Cyberman Technical Specification," <i>Logitech Cyberman SWIFT Supplement to Logitech Mouse Technical Reference and Programming Guide</i> , 4/5/1994.
		OUHYOUNG et al., "The Development of A Low-Cost Force Feedback Joystick and Its Use in the Virtual Reality Environment," <i>Proceedings of the Third Pacific Conference on Computer Graphics and Applications, Pacific Graphics '95</i> , Seoul, Korea, 21-24 August 1995.
		KACZMAREK et al., "Tactile Displays," <i>Virtual Environment Technologies</i> , Chap. 9, pp. 349-414.
		LAKE, "Cyberman from Logitech," at <a href="http://www.ibiblio.org/GameBytes/issue21/greviews/cyberman.html">http://www.ibiblio.org/GameBytes/issue21/greviews/cyberman.html</a> , 1994.
		"Component Maintenance Manual With Illustrated Parts List, Coaxial Control Shaker Part no. C-25502," Safe Flight Instrument Corporation, Revised 28 January 2002 (3 pages).

Examiner Signature	<i>Jeffery A. Brier</i>	Date Considered	3/6/06
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Sheet	3	of	3	Attorney Docket Number	IMMR035/02US

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
		*Technical Manual Overhaul Instructions With Parts Breakdown, Coaxial Control Shaker Part no. C-25502," Safe Flight Instrument Corporation, Revised 15 July 1980 (23 pages).
		SCANNELL, "Taking a Joystick Ride," Computer Currents, Boston Edition, Vol. 9, No. 11, November 1994
		YAMAKITA et al., "Tele-Virtual Reality of Dynamic Mechanical Model," Proceedings of the 1992 IEEE/RSJ International Conference on Intelligent Robots and Systems, Raleigh, NC, July 7-10, 1992
		NOLL, "Man-Machine Tactile," S/D Journal, July/August 1972 Issue.
		ROSENBERG, "Virtual Fixtures: Perceptual Overlays Enhance Operator Performance In Telepresence Tasks," Ph.D. Dissertation, Stanford University, June 1994.

Examiner Signature	<i>Jeffery A. Brier</i>	Date Considered	3/6/06
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JB		IWATA, HIROO, "Pen-based Haptic Virtual Environment," IEEE 0-7803-1363-1, 1993, pp. 287-292.	
JB		JONES, L.A., "A Perceptual Analysis of Stiffness," Exp. Brain Research, 79:150-156, 1990.	
JB		BURDEA, GRIGORE et al., "Distributed Virtual Force Feedback," IEEE Workshop on Force Display in Virtual Environments and its Application to Robotic Teleoperation, 1993, pp. 25-44.	1993, pp. 25-44.
JB		MINSKY, M., "Creating an Illusion of Feel: Control Issues in Force Display," Computer Science Dept., Univ. of N. Carolina at Chapel Hill, 1989, pp. 1-14.	

/JB/  
03/04/2009

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